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## Overview

### Mission

What if anyone in the world could publish digital content, anyone else in the world could access it (for free or for payment), and that entire system worked without any centralized authority or point of control?

#### MISSION STATEMENT

To create a market for accessing and publishing information<sup>1</sup> that is global<sup>2</sup>, decentralized<sup>3</sup>, robust<sup>4</sup>, optimal<sup>5</sup> and complete<sup>6</sup>.

That's a fancy sentence, so here's a plain one: we thought it'd be *damn cool* if there was a system that made it easy to discover and distribute as much of the world's information as possible but was owned and controlled by no one.

<sup>1</sup> In the information theoretic sense, LBRY facilitates distribution of all data, whether it be a video or a spreadsheet.

<sup>2</sup> Accessible anywhere in the world on any internet-connected device.

<sup>3</sup> Not controlled by any one person, party or authority.

<sup>4</sup> Resistant to censorship or attempts to control; impervious to attacks or disruptions.

<sup>5</sup> In the Pareto sense, with regards to the production and distribution of information (i.e. digital information is both created and distributed in a way that could not be any more efficient from the perspectives of information producers and consumers).

<sup>6</sup> The most complete collection of world's books, films, art, games, etc. should be available via LBRY.

### Ecosystem Overview

Learn more about the specific components that make LBRY possible.

chainquery

wallet server

#### Blockchain



Key repositories  
lbrycrd SDK

This section assumes "blockchain" already means something to you. If you're new, the central problem solved by blockchain is the ability for distributed, disparate entities to all agree on a rivalrous state of affairs. For a thorough introduction to blockchain, start [here](https://lopp.net/bitcoin.html) (<https://lopp.net/bitcoin.html>).

LBRY uses a public, proof-of-work blockchain that is very similar to Bitcoin. The blockchain is the foundation of the protocol stack.


The most salient feature of the LBRY blockchain is the association of a normalized string of characters (a "name") with a structured set of metadata. This coupling is called a [claim](#) ([/glossary#claim](#)). The content referenced by a claim can be accessed as a LBRY URL, e.g. [lbry://hellolbry \(/playground?url=hellolbry\)](#).

The LBRY blockchain stores names and metadata in a parallel [Merkle tree](#) ([/resources/claimtrie](#)), separate from the tree used to store transaction data. This allows LBRY URLs to be trustfully resolved even without a full copy of the blockchain.

The metadata contains information about the content, such as the title, creator, price (if any), and a unique signature allowing the actual content to be fetched from the data network, the next level in the LBRY stack.

#### Additional Resources

- The Specification contains a comprehensive documentation of the LBRY blockchain and protocol.
- Resources has documentation about using the LBRY blockchain, including its APIs.

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## Data Network

What makes the LBRY blockchain useful.

□ □ □

## Applications

Desktop clients, mobile apps, websites and ∞ more

□ □ □



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### Keep Diving

- Explore live metadata and add your own blockchain entry in the Playground.
- Read the specification to know more about LBRY than the person who made this website.
- Find API specifications and other learning materials in Resources.
- Learn how to contribute to LBRY or build your own application.

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chainquery

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#### Blockchain

The foundation of the LBRY protocol.

#### Data Network



*App repositories*

lbrysdk lbryschema

While the blockchain is the innovation that makes LBRY *possible*, the Data Network ([/spec#data](#)) is the layer that actually makes the blockchain *useful*.

At this level:

- Metadata stored in the blockchain is interpreted and validated.
- Data referenced by metadata is accessed and distributed via a peer-to-peer network.
- Identities are created, signed, and validated.

Data network operations are provided by the [lbrysdk](#) (<https://github.com/lbryio/lbry-sdk>). This SDK also provides local wallet functionality and a set of APIs to facilitate building applications.

#### Additional Resources

- The Specification contains a comprehensive specification of data network operations.

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- Resources has further documentation on the LBRY SDK, including its APIs.
- Build teaches you how to create your own app.
- Contribute guides you on how to improve the protocol itself.

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## Applications

*Desktop clients, mobile apps, websites and ∞ more*

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### Ecosystem Overview

Learn more about the specific components that make LBRY possible.



### Applications

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key repositories

android desktop spee.ch

Applications are the final level of the LBRY stack. They represent how most people will actually use LBRY.

Applications typically use the [lbry-sdk](#) ([/glossary#lbry-sdk](#)), which provides convenient API methods for building applications.

LBRY Inc. currently releases and maintains three applications:

- LBRY Desktop, a desktop browser for the LBRY network based in React and Electron available on Windows, macOS, and Linux.
- LBRY Android, an Android browser for the LBRY network in React Native and available in the playstore.
- spee.ch, a web-based sharing and organizational app designed for self-hosting.

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A central idea of LBRY is that there's *not* a singular way to interact with the network. Anyone can build on top of LBRY in a permissionless manner. LBRY Inc. maintains open-source applications, [what's possible](#) and to give new users a user-friendly experience on the network.

### Additional Resources

- Build teaches you how to create your own app.
- Contribute guides you on how to improve LBRY Inc. applications.
- spee.ch README explains how to host your own instance.



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